Trials taken in Poland in the field of the use of e-prescriptions

(Próby podjęte w Polsce w zakresie stosowania e-recepty)

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Abstract A pilot introduction of an e-prescription in Poland was discussed. The introduction of the e-prescription prototype gave the opportunity to check which elements should work better, what is and works well and what is missing. In order for the e-Reception system to function well, particular attention should be paid to the standards included in the Interoperability Regulation. In all cases, the cooperation of individual participants of the health care system is important , which would allow to create a solution that takes into account the needs of all people. In addition, the gradual implementation of the e-prescription is very important . to get the full picture of Public Health students' networking skills.

Key words **-** Poland, e-prescriptions.

Streszczenie – Omówiono pilotażowe wprowadzenie w Polsce e-recepty. Wprowadzenie prototypu e-recepty dało możliwość sprawdzenia, które elementy powinny działać lepiej, co jest i działa dobrze, a czego brakuje. By system e-Recepta mógł dobrze funkcjonować trzeba zwrócić szczególną uwagę na standardy umieszczone w Rozporządzeniu o interoperacyjności. We wszystkich przypadkach, istotna jest współpraca poszczególnych uczestników systemu ochrony zdrowia, co pozwoliłoby na stworzenie rozwiązania, uwzględniającego potrzeby wszystkich osób. Ponadto, bardzo ważna jest stopniowa implementacja e-recepty.

Słowa kluczowe **-** Polska, e-recepty.

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B. Gathering and listing data
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D. Writing the article
E. Critical review of the article
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I. INTRODUCTION

In 2011, the Information Systems Center for Health Care (CSIOZ) introduced the e-Prescription prototype in Leszno and the Leszno poviat. Initially, the system was tested by only 19 entities, but during its lifetime, more than a dozen other branches reported their participation. The reluctance resulted mainly from the pharmacies. They were afraid to take part in the project, due to legal regulations that clearly say that the pharmacy may have their license revoked if the collected data will be passed on to someone other than the National Health Fund. The Wielkopolska Regional Chamber of Pharmacy reported to the GIF and the Provincial Department of the National Health Fund asking for an answer to the question of how to proceed, because the prototype included the transmission

of information in addition to the CSIOZ. The matter has not been resolved. Only the recommendation of prudent behavior was issued [1]. The implementation of the prototype began with uploading interfaces and setting up user accounts in institutions that agreed to participate in the tests. The e-prescription prototype was based on the functioning of two solutions. In addition to the traditional paper prescription, which is currently the only acceptable form of medicine purchase, an electronic recipe was generated that went to the central system. Practically, the patient received a standard paper prescription from the doctor and went to the pharmacy with her. The pharmacist carried it out in the usual way, but at the same time he had the opportunity to download an electronic prescription from a special platform. In fact, the patient's participation in implementing the prototype of the new solution did not involve the need to perform additional activities [2].

Participants in the health care system have no doubts about the need to introduce new IT and telecommunications solutions that will improve the work. However, they expect them to be more practical. Useful for doctors would be the opportunity to check if the patient is insured before issuing a prescription. Unfortunately, in the proposed prototype, this function was not included. It may be available only in the next phases of the project [3]. An important thing is also access to earlier prescriptions and information on the degree of their implementation. Practically, according to the assumptions of the prototype, the patient made a decision regarding which doctor and what information he could see in the system. Nevertheless, the participants who tested the e-Prescription prototype were saving time as one of the main benefits. This is a very important aspect that will allow the increase of work efficiency [1].

The introduction of the e-Prescription prototype also caused some doubts. In particular, they concerned the protection of personal and sensitive data. Pharmacists reported that patients' personal data and information about prescribed drugs and their costs are poorly protected and may be traded due to their high marketing value. Despite this, the people responsible for the prototype implementation say that their fears are groundless, and the whole project is well protected against the acquisition of data by foreign persons [1].

The introduction of the e-prescription prototype gave the opportunity to check which elements should work better, what is and works well and what is missing. Meetings that took place with the participants of the project made it possible to get to know the expectations of people directly interested in its success. Taking into account most of the needs of participants of the health care system will contribute to the creation of an intuitive, efficient and useful project that can be implemented across the country. In order for the e-Reception system to function well, particular attention should be paid to the standards included in the Interoperability Regulation.

In summary, the concepts presented above show numerous similarities, for example in terms of good practices. However, they also point to differences in the approach to the creation of an e-prescription system. In all cases, the cooperation of individual participants of the health care system was important, which allowed to create a solution that would take into account the needs of all people. In addition, the gradual implementation of the e-prescription was very important. This allowed for the system to be improved every time, so that in subsequent regions of the country there were no errors that appeared earlier. In Spain, there is a similar e-prescription system to operate in Poland. The health insurance card, which is to be introduced in our country, is similar. It would be worth analyzing the way it functions and the role in the e-prescription system in order to be able to draw conclusions and improve the planned solution. One of the elements could be the introduction of cards with a chip that would allow easy identification of the patient. The second proposal that Poland could take into account is the possibility of choosing a pharmacy where we want to buy medicines. The example of Sweden shows that this solution works well. The pharmacist can safely prepare the medication and the patient will pick them up, saving time. Another important thing is the fact that the system introduced in Poland should provide the patient with the opportunity to view their record from home, so that they can analyze the history of the disease and prescribed medications. It is also good practice to conduct training and instruction, which will allow patients to know what an e-prescription is and the doctors will show the correct way to do it. A very important convenience is also the possibility of extending the prescription for patients with chronic diseases, without the need to visit a doctor. This saves time not only for the doctor but also for the patient. In order for the e-prescription system to work properly, it takes time. The example of the United States shows that everything is possible if everyone gets the time to get used to the new one system. It is worth keeping the team responsible for creating the e-Prescription system in Poland, analyzing the way of creating, implementing and operating solutions functioning in other countries. This will eliminate or significantly reduce errors that have occurred with previous implementations.

II. E-PRESCRIPTIONS IN POLAND

Since May 2018, he was introduced in Siedlce and Skierniewice piloting e-prescriptions, in September to a program that enters Krynica Zdroj (province. Lesser), and then Polanica Zdroj (province. Lower Silesia), Pleszew (province. Greater) and Chelm e (province Lublin). The pilot is to be covered by 130 pharmacies.

The pilot has been divided into stages. In the first stage, the main activities are directed to pharmacies and medical entities. The Center of Healthcare Information Systems (CSIOZ) has made available the P1 System production environment to which successively the local office and hospital systems of medical entities and pharmacies' systems participating in the pilot program will be connected. The purpose of this stage is to examine the correctness of the connection process and following the operation of the system.

As part of the stage, trainings for medical personnel and pharmacists are planned, and a support line for medical entities, pharmacies and pharmacies will be launched software producers.

The end of the stage and the transition to the next will take place when all willing entities and pharmacies will successfully integrate with the P1 System.

In the next stages, individual system functionalities will be included e-Prescriptions, including the implementation of an e-prescription or access to the Patient's Internet Account.

It is pointed out that the difficulties identified during the piloting and gathering the opinions of users will influence the shape of the final solution.

The program was launched on May 25, 2018. , and from January 1, 2019, each pharmacy is supposed to support an e-prescription, while from 2020 an electronic prescription will be valid in all of Poland. From data provided until August 10, 2018, as part of the pilot program, 9.3 thousand e-prescriptions were issued. Most in Skierniewice in 1900. [4,5]

The following branches participate in the pilot program in Siedlce [4,5] :

- Mazowiecki Provincial Hospital in Siedlce,
- Independent Public Health Care Center in Siedlce,
- Medical and Diagnostic Center in Siedlce
- Team of Medica Specialists in Siedlce.

It is characteristic that over 50% of electronic prescriptions were issued to patients of the age of 60 years (Figure 1) , while the average age of doctors who have used e-prescriptions is 49 years.

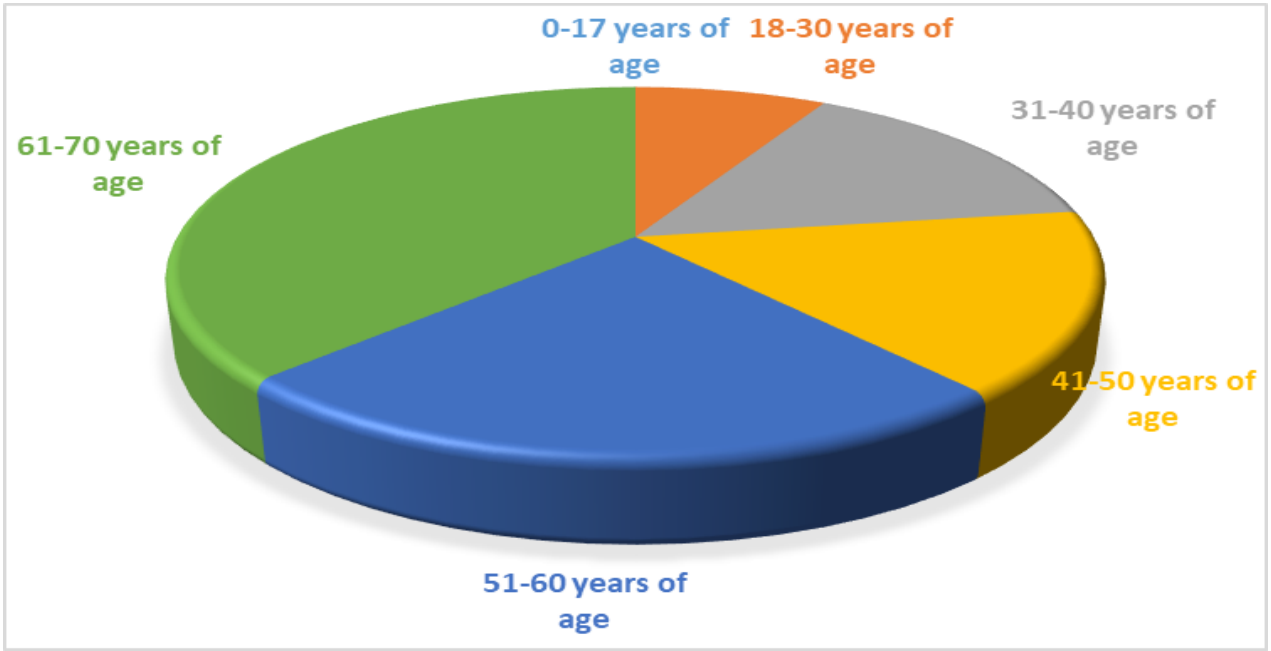

Figure 1. Age distribution of patients who were given e-prescriptions as part of the pilot [4,5]

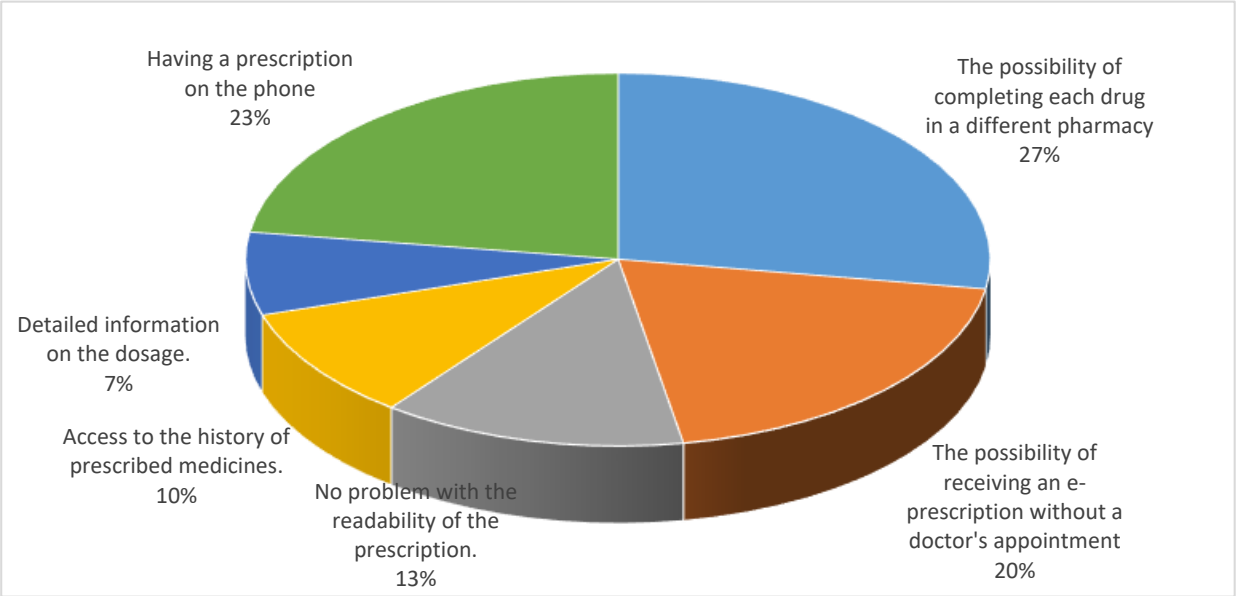

Figure 2. Patients' opinions on pilotage [5]

It was also pointed out that the biggest problems were created by the software of individual suppliers of individual entities and pharmacies. It is emphasized that E-prescriptions are associated with the e-documentation system. According to the available information, many entities and practices will not meet the technical and functional requirements allowing the use of the e-documentation system.

Big problems with proper use of e-documentation may also be experienced by patients themselves, especially those who do not have computers, smartphones, do not use them on a daily basis, which makes it difficult for them to set up an e-account. Older people prefer prints, because in order to be able to implement an electronic prescription, they would have to set up an Internet Patient Account themselves. [4]

This opinion, however, did not find full confirmation in the obtained results. The patients' opinions on pilotage are presented in Figure 2.

III. REFERENCES

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